



## Technology Needs Assessments: Introduction and Overall Approach

**Painuly, J.P.**

*Publication date:*  
2010

[Link back to DTU Orbit](#)

*Citation (APA):*  
Painuly, J. P. (Author). (2010). Technology Needs Assessments: Introduction and Overall Approach.  
Sound/Visual production (digital)

---

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

# Technology Needs Assessments

## Introduction and Overall Approach

Inception Workshop

UNEP DTIE

Paris, February 17-18, 2010

Jyoti Prasad Painuly  
Sr. Energy Planner  
UNEP Risoe Centre, Denmark

## Project Objectives

- To identify and prioritize through country-driven participatory processes, technologies that can contribute to mitigation and adaptation goals of the participant countries, while meeting their national sustainable development goals and priorities (TNA).
- To identify barriers hindering the acquisition, deployment, and diffusion of prioritized technologies.
- To develop Technology Action Plans (TAP) specifying activities and enabling frameworks to overcome the barriers and facilitate the transfer , adoption, and diffusion of selected technologies in the participant countries.

## Project Highlights

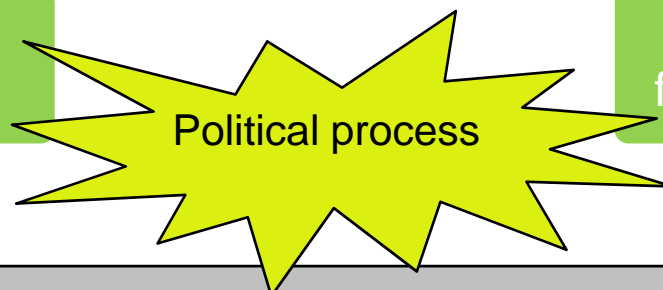
- Project start date – **November 2009**
- PSC approval of selection of 15 countries for the first round and announcement in the COP 16 side event – **December 2009**
- Completion of work by first round countries due in 18 months – **June/July 2011.**
- 2nd round, involving 20 to 30 countries to be launched - **October 2010**
- Total project duration: 30 months - **April 2012**
- Initial methodology development and capacity building work to be completed in the first 6 months - **April 2010.**
- International Consultants/Regional Centres and URC to provide technical support, capacity building.

# From TNAs to TAPs

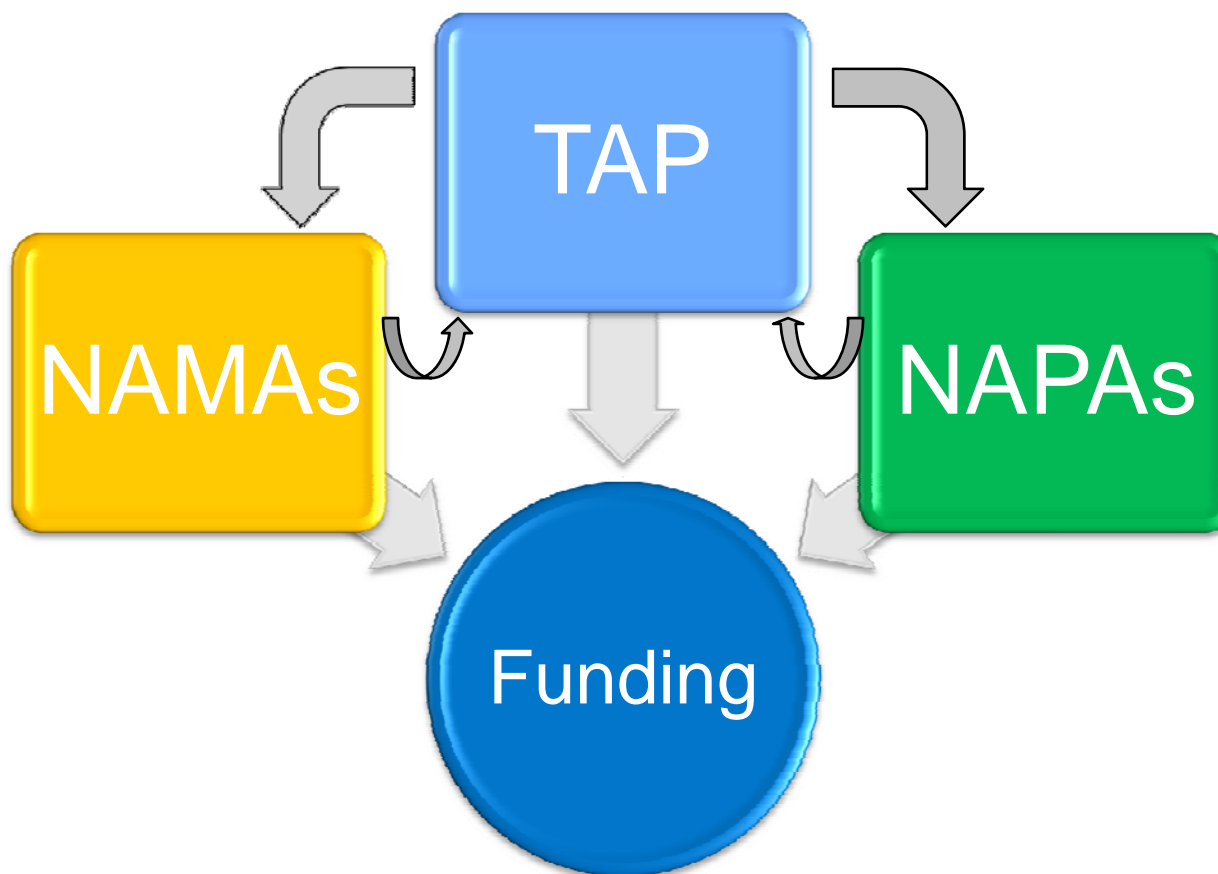
## Mitigation technologies



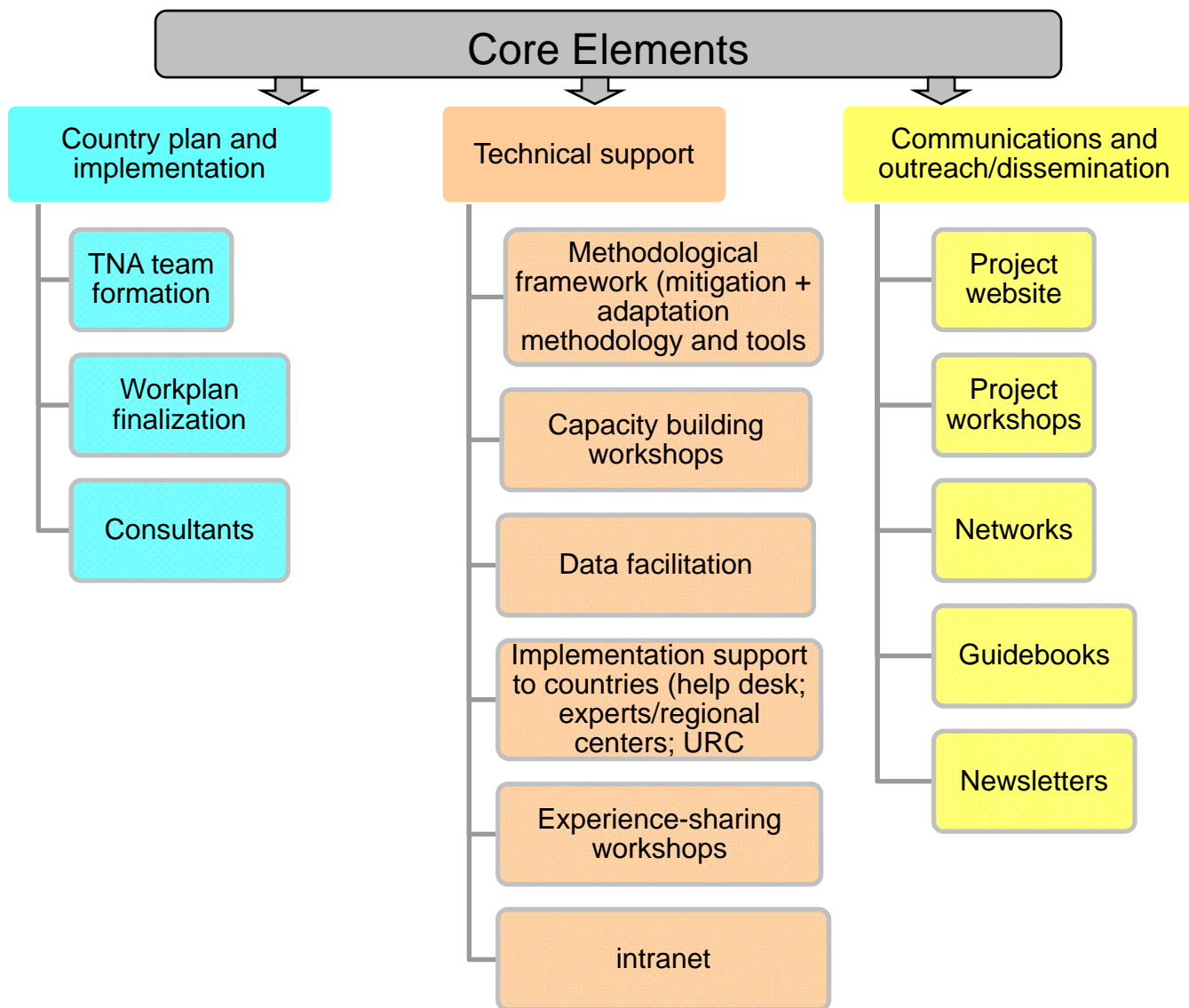
## Adaptation technologies



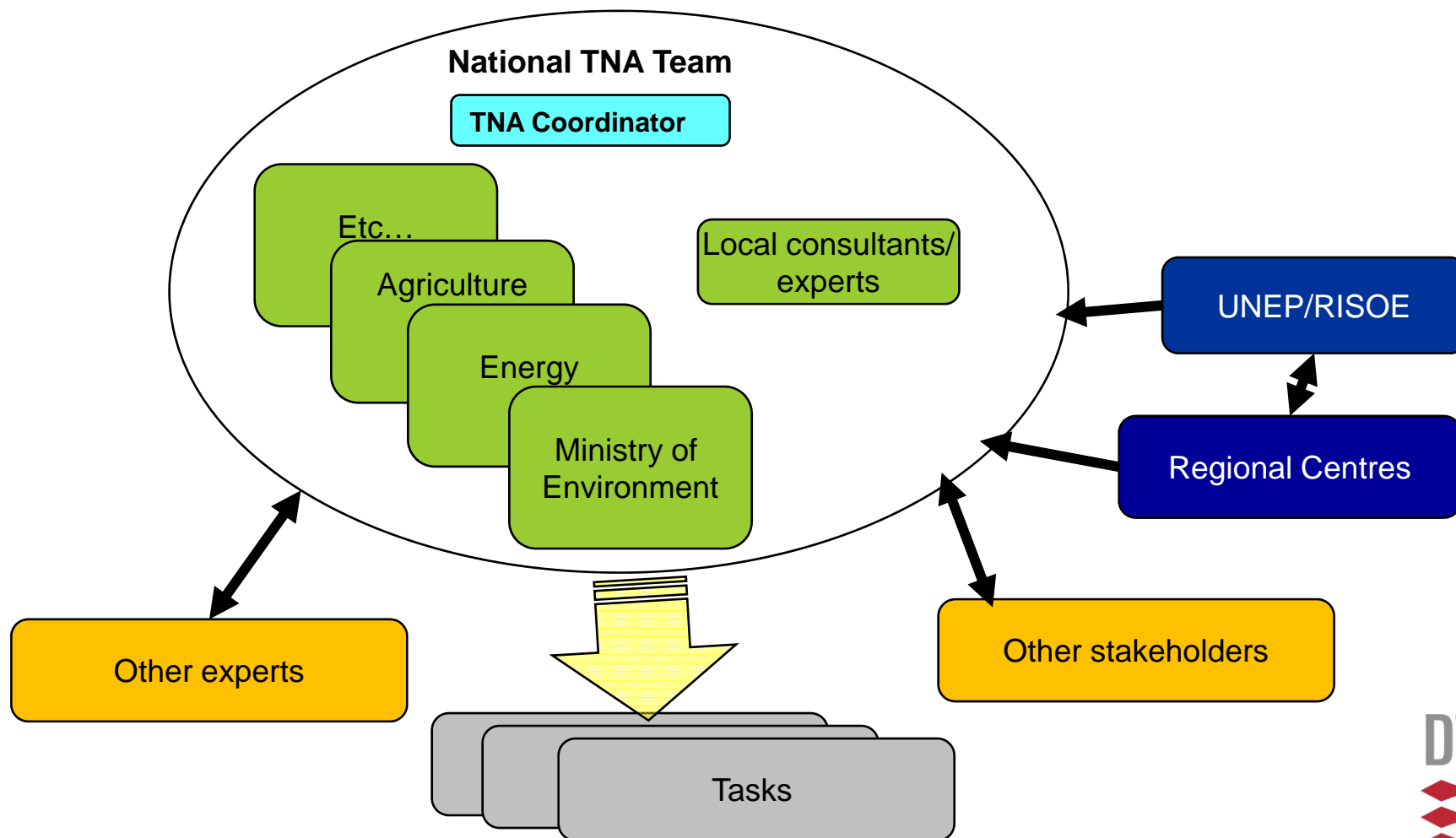
## TAP, NAMAs and NAPAs



# Approach



## Approach (cont'd)





## Why this approach ?

### First Round TNAs- Lessons Learnt

- 1999- onwards
- UNDP and UNEP Synthesis (2008)
  - Strengthening national capacity should be a key priority for future work on technology transfer activities.
  - Adaptation needs strengthening
  - Stakeholders role needs to be well defined and involvement strengthened
  - Non-technological options need to be given better attention
  - Activities should be well defined and timely technical guidance should be available
  - Implementation of the findings needs to be supported
  - ....

## TNA Best Practices

- A good institutional set-up needed
  - Project coordinator and team (of experts) right candidates
  - Stakeholder group from key relevant institutions
- Detailed workplan with clear objectives and roles, in consultation with stakeholders
- Use right (most recent) methodology, adapt guidance to national circumstances
- Decide on the tool of prioritization in accordance to the national circumstances
- Use a wide range of criteria, identify a small number of key sectors
- Conduct a barrier analysis for the selected/prioritized technologies
- Draw implementation plans to address the barriers identified
- Develop project proposals
- And so on

Source: UNFCCC Workshop, 2007

## Country Workplan (Generic)

SI No.	Activity	2010				2011			
		1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
	Month								
1.	Establishing TNA Team, Project Coordinator, and carrying out preparatory work - Organising stakeholders - Finalising work-plan - National Inception Workshop								
2.	Prioritizing Sectors and Technologies								
3.	Market Analysis / Barriers Analysis of prioritized technologies and Developing Enabling Framework (Conducting techno-economic appraisal of prioritized technologies, where applicable)								
4.	Preparing Technology Action Plan (TAP)								
5.	Preparing and implementing official launches of selected (high-profile) project proposals (set of proposals).								
6.	Preparing and submitting the Final Report								

## Milestones

Sr. No.	Milestone	Scheduled Date
	Award of Project by GEF	October 2009
	Project start date	Nov. 2009
	Completion of Project	April 2012
1.	Selection of 15 countries (1 <sup>st</sup> Round)	December 2009
2.	Inception Workshop	February 2010
3.	Agreement with countries signed after country consultations and work plan finalization.	April 2010
4.	Capacity Building Workshops on approach	April 2010 and Sept. 2010
5.	Experience Sharing Workshops	November 2010 and Sept. 2011
6.	Side Event at COP Mexico	December 2010
7.	Release of TNA Reports	January 2011
8.	Release of TAPs	June 2011-Aug 2011
9	Final Country Report submissions	July-Sept, 2011

# Thank You

Jyoti Prasad Painuly

[Jypa@risoe.dtu.dk](mailto:Jypa@risoe.dtu.dk)

# Technology Transfer- a brief history

- Rio Summit, 1992: Agenda 21- Need for technology transfer. Also in the **UNFCCC Convention in Articles 4.3, 4.5 and 4.7**
- COP 1 1995; Berlin Mandate (discussions on issues)
  - Projects inventory, financing, networks of centres, adaptation technologies
- COP4; 1998; Buenos Aires Plan of Actions (Consultative process)
  - Regional workshops in Asia, Africa, and Latin America and the Caribbean
- COP 7; Marrakesh Accord: **Technology Framework**
  - Technology needs assessments, technology information, enabling environments, capacity building, mechanisms

# Technology Transfer- a brief history

- COP 13; **Bali Action Plan**
  - Update TNA handbook
- COP 14; **Poznan**
  - The Strategic Program on Technology Transfer (proposed by the GEF; on request from COP13 in Bali) consists of three funding windows:
    - **technology needs assessments (TNAs);**
    - **piloting priority technology projects; and**
    - dissemination of successfully demonstrated technologies.
  - **The program US\$50 million, and will be implemented until June 2010.**
  - Poznan decision also asked the GEF to “consider the long-term implementation of the strategic program.”
- Other Developments
  - IPCC Special Report on Methodological and Technological issues Technology Transfer
  - **EGTT and Technology Information System- TT: CLEAR at UNFCCC**
  - **GEF- TNA exercises (92 countries; 1999-2004)**